

DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS

Title 3, California Code of Regulations

Article 8

Section 3963, South American Spongeplant Eradication Area

INITIAL STATEMENT OF REASONS/
POLICY STATEMENT OVERVIEW

Description of the Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulation is Intended to Address

This regulation is intended to address the obligations of the California Department of Food and Agriculture to protect the agricultural industry of California and prevent the introduction and spread of injurious plant pests.

Specific Purpose and Factual Basis

The specific purpose of Section 3962 is to provide authority for the State to perform eradication activities against *Limnobium laevigatum* to protect California's agricultural industry and environment.

The factual basis for the determination by the Department that the amendment of Section 3963 is necessary is as follows:

South American spongeplant (*Limnobium laevigatum*) was detected in a residential pond near the Sacramento River, in Redding, Shasta County. South American spongeplant is an aquatic noxious weed that has the potential, if allowed to spread downstream from this current infestation, to clog waterways, block water control structures, and supplant native plants, degrading the native ecosystem and negatively impacting the growth and reproduction of fish and wildlife resources. This incipient infestation, if not eradicated, would have served as a source to infest the most important waterways in the State, including the Central Valley Project, the State Water Project, the Sacramento River and the Sacramento-San Joaquin River Delta. This would have been detrimental to the State, and could have

caused irreparable injury to the agricultural industry, environment and recreational use of streams, lakes, and waterways. As a result, the Department adopted Section 3963, South American Spongeplant Eradication Area, as an emergency action that was effective June 3, 2005.

In November 2007, South American spongeplant was detected in the San Joaquin River, in an area that serves as the county boundary line between Fresno and Madera counties. As a result, Section 3963 was amended as an emergency action that was effective on December 26, 2007.

On March 19, 2008, the Merced County Agricultural Commissioner's office informed the Department that South American spongeplant had been detected in the San Joaquin River in Merced County in August of 2007. Although an immediate effort was made to remove the existing plants, it is believed that more plants will be detected during a more intensive survey during early summer. Therefore, Section 3963 needs to be amended to include Merced County.

The South American spongeplant may possess a similar potential for invasiveness as water hyacinth (*Eichhornia crassipes*), which is among the world's worst aquatic weeds. South American spongeplant is capable of doubling its biomass in one week and can potentially overrun native ecosystems and water conveyance systems in the State. Its rapid proliferation leads to dense mats of plants that cover water bodies, reduce light and oxygen, and change the water's chemistry, fauna and flora. It forms large, free-floating, monospecific mats that compete with other aquatic species for light, nutrients and oxygen. Mats reduce dissolved oxygen levels and light and significantly alter invertebrate and vertebrate communities. As biomass from mats decomposes, organic input to sediments increases dramatically. Fish spawning areas may be reduced and critical waterfowl habitat may be degraded. It can reduce the recreational value for boating, fishing, swimming and create foul odors from its decay that creates anaerobic water conditions. Additionally, South American spongeplant poses a public health threat due to West Nile virus by making a potentially more desirable mosquito habitat. An emergency project to eradicate this

incipient infestation now will protect the State's resources from degradation by the spread of this aquatic, noxious weed.

The Department has also consulted with the Shasta County Department of Agriculture, the California Agricultural Commissioners and Sealers Association; the Exotic and Invasive Weed Management Unit, Agricultural Research Services, United States Department of Agriculture; the Invasive Species Coordinator, Habitat Conservation Planning Branch, California Department of Fish and Game; and, the California Invasive Plant Council and all see the need and are in support of the immediate eradication of South American spongeplant.

The spongeplants (genus *Limnobium*) are monocotyledonous floating or semi-terrestrial aquatic perennials of the waterweed family (Hydrocharitaceae). This family contains several other known serious invasive weed pests, most notably hydrilla (*Hydrilla verticillata*), but also egeria (*Egeria densa*) and elodea (*Elodea canadensis*).

South American spongeplant reproduces rapidly by both seed and stolons, quickly filling the available habitat with both clones and new individuals; it is often considered pestiferous even in its native range. South American spongeplant can be floating or rooted against shorelines; in either situation can produce mats of vegetation via stolons, which can grow across the water surface. Daughter plants are formed at the stolon nodes and can subsequently spread through fragmentation. In addition, South American spongeplant can also reproduce sexually and disseminate by seed. The one-millimeter long seeds are covered at maturity with small spinules and when shed are contained in a many-seeded gelatinous mass; both the gelatinous mass and individual seeds readily attach to watercraft, waterfowl, floating debris or other material. The seeds are shed above water, but germinate submerged and the seedlings float to the surface where they grow rapidly. The juvenile South American spongeplant can be recognized by the distinct spongy pad on the leaf undersurface, which serves as a float. When adult aerial leaves are formed the petiole becomes spongy and provides buoyancy. The ease of spread of South American

spongeplant makes it critical that eradication measures be implemented as soon as possible to prevent spread.

The South American spongeplant does not have specialized over-wintering structures. Perenniality is achieved in non-tropical zones by the survival of fragments in sheltered locations, from where they can re-expand their population the following season.

The proposed amendment of Section 3963 would establish Merced County as an additional eradication area for South American spongeplant. The entire county is being proposed as eradication areas since future detection surveys may result in finds of additional small South American spongeplant infestations outside the current known area. To enable rapid treatment of newly discovered small infestations without frequent amendment of the regulation, the entire counties should be established as an eradication area.

The effect of the amendment of this regulation will be to implement the State's authority to perform control and eradication activities against South American spongeplant in Merced County. Eradication actions undertaken by the Department will be in cooperation and coordination with federal, city, county, and other state agencies as deemed necessary by the Department to ensure no long-term significant environmental impacts. To prevent spread of the weed to non-infested areas to protect California's agricultural industry and environment, it is necessary to amend this regulation.

Estimated Cost or Savings to Public Agencies or Affected Private Individuals or Entities

The Department of Food and Agriculture has determined that Section 3963 does not impose a mandate on local agencies or school districts. The Department also has determined that no savings or increased costs to any State agency, no reimbursable costs or savings under Part 7 (commencing with Section 17500) of Division 4 of the Government Code to local agencies or school districts, no nondiscretionary costs or savings to local agencies or school districts, and no costs or savings in federal funding to the State will result from the proposed action.

The agency is not aware of any cost impacts that a representative private person or

business would necessarily incur in reasonable compliance with the proposed action.

The Department has determined that the proposed action will not have a significant adverse economic impact on housing costs or California businesses, including the ability of California businesses to compete with businesses in other states. The Department's determination that this action will not have a significant adverse economic impact on businesses was based on the following:

This regulation will establish the authority for the Department to perform eradication activities against South American spongeplant. Therefore, there are no additional cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Assessment

The Department has made an assessment that this amendment to the regulations would not (1) create or eliminate jobs within California, (2) create new business or eliminate existing businesses within California, or (3) affect the expansion of businesses currently doing business within California.

Alternatives Considered

The Department of Food and Agriculture must determine that no alternative considered would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

Information Relied Upon

The Department relied upon the following studies, reports, and documents in the adoption of Section 3963:

Email dated March 19, 2008, from Donald Mayeda to Stephen Brown.

"Pest and Damage Record #1351437," dated August 21, 2007, California Department

of Food and Agriculture, Plant Health and Pest Prevention Services.

Letter, undated, from David Kratville, to Emily Alejandrino.

Memo dated May 17, 2005, from Susan Ellis, to Larry Bezark.

Letter dated May 12, 2005, from Mary Pfeiffer, to A.G. Kawamura.

Letter dated May 6, 2005, from Doug Johnson, to A.G. Kawamura.

Letter dated May 3, 2005, from Mark Quisenberry, to A.G. Kawamura.

Letter dated April 29, 2005, from David F. Spencer, to Dr. J Robert Leavitt.

Letter dated April 11, 2005, from Dr. J Robert Leavitt, to Ms. Emily Alejandrino.

Letter dated December 16, 2004, from Emily Alejandrino, to Robert Leavitt.

“South American Spongeplant Eradication Project Workplan and Aquatic Pesticide Application Plan,” California Department of Food and Agriculture.

“Notice of Intent to Comply with the Terms of Water Quality Order No. 2004-0009-DWQ Statewide General National Pollutant Discharge Elimination System Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States, General Permit No. CAG990005,” State Water Resources Control Board.